

Work Order ID 145481

Thursday, May 05, 2016 3:14:38 PM

647.3901
B145481
REV. C2

145481

Page 1

Item ID: 647.3901

Revision ID:

Item Name: Lower Deflector Assembly, Low

Start Date: 5/2/2016 Start Qty: 5.00

Required Date: 5/5/2016 Req'd Qty: 5.00

Reference:

Accept

N900040100

Setup

Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan: Em

Date: 16/05/06

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

647.3900

C2

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

DAS
6
9-89

JUN 07 2016

120

0.00

120

Small Fab

Memo

1.05

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces per note.

A/R RTV LOCTITE 598:

exp. date:

09/17 M134524

5X

16/05/16

DAS
36
9-89

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.10

Quality Control

(5)

DAS
38
9-89

JUN 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 145481

Thursday, May 05, 2016 3:14:38 PM

145481

Page 2

Item ID: 647.3901 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Lower Deflector Assembly, Low
 Start Date: 5/2/2016 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 5/5/2016 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location: <u>CCT060</u>	0.00							
140									
Packaging	Memo	0.05							
Packaging	***IDENTIFY AS PER IAW MPP-120***								
						5	DAS 6 9-89		JUN 01 2016
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.50							
Quality Control									

16/06/05 BJA / HJ

MLJ JUN 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
2									

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Thursday, May 05, 2016 3:14:38 PM

Page 1

Work Order ID: 145481

145481

Parent Item: 647.3901

647.3901

Parent Item Name: Lower Deflector Assembly, Low

Start Date: 5/2/2016

Required Date: 5/5/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A 13.09.03 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.3912 *647.3912* Lower Deflector		Manufactured	No				Each	18.0000		5			DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				CCK077				18					
				124409				2		2			
				127896				10					
				131075				6		3			
647.3913 *647.3913* Breakaway Tip Medium		Manufactured	No				Each	11.0000		5			DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				cck111				11					
				123518				4					
				124488				7					
MS20470AD6-12 *MS20470AD6-12* Rivet		Purchased	No				Each	135.0000		10			DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST308				135					
				m127304				135		10			

MAY 25 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

ENGINEERING CHANGE NOTICE NO. 04948

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY:

M. ANDECK

DATE: 05/04/15

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY:

ENGR

Brans

MFG

Dave Baker

QC

[Signature]

EFF:

CURRENT ORDER

ECR:

D-15-01

REASON: REVISED TOLERANCE AND NOTES

NOTES:

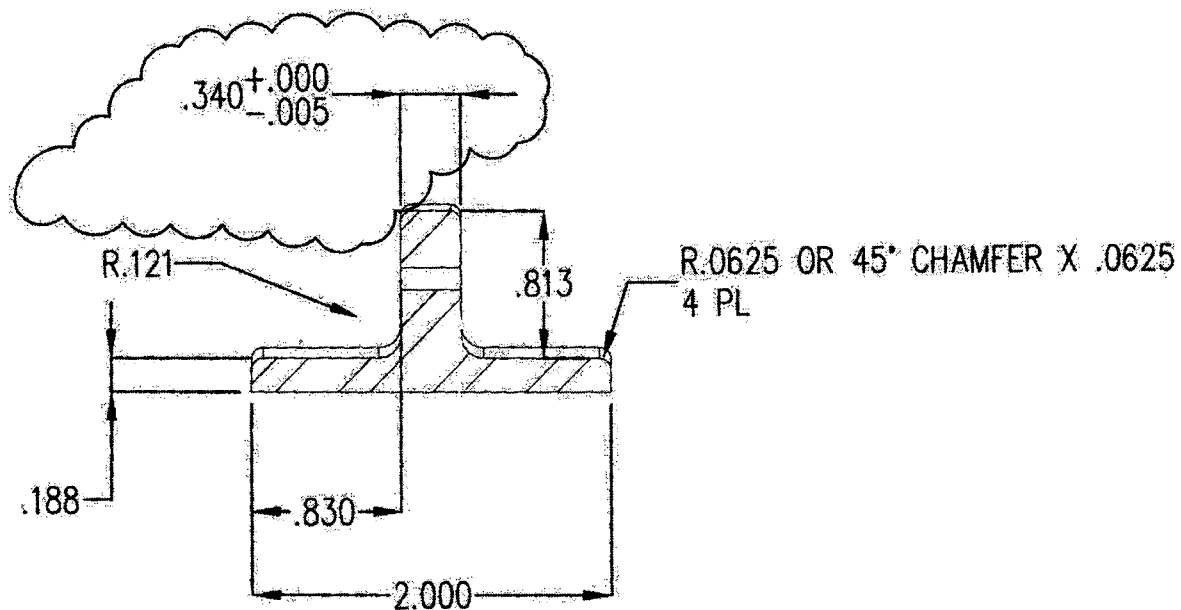
- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.
- 10 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.

SHEET 1, ZONE B1 IS:

11	R	647.3917	2			DOUBLER		
F/N	TC	PART NUMBER	.3903	.3902	.3901	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY					
DOCUMENTS EFFECTED:							CHANGE CATEGORY	DER REVIEW REQUIRED
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☒ BOM							☐ MAJOR ☒ MINOR	☐ YES ☒ NO

w/o 145481

Sm 16/05/06



SECTION AT-AT

SHEET 11, ZONE C1 IS:

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04556

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY D. MEJIA

DATE: 06/10/2014

EFFECT ON DWG
☐ INC. ☒ UNING.

DWG TITLE: DEFLECTORS

APPROVED BY:	ENGR
--------------	------

MFG

QC

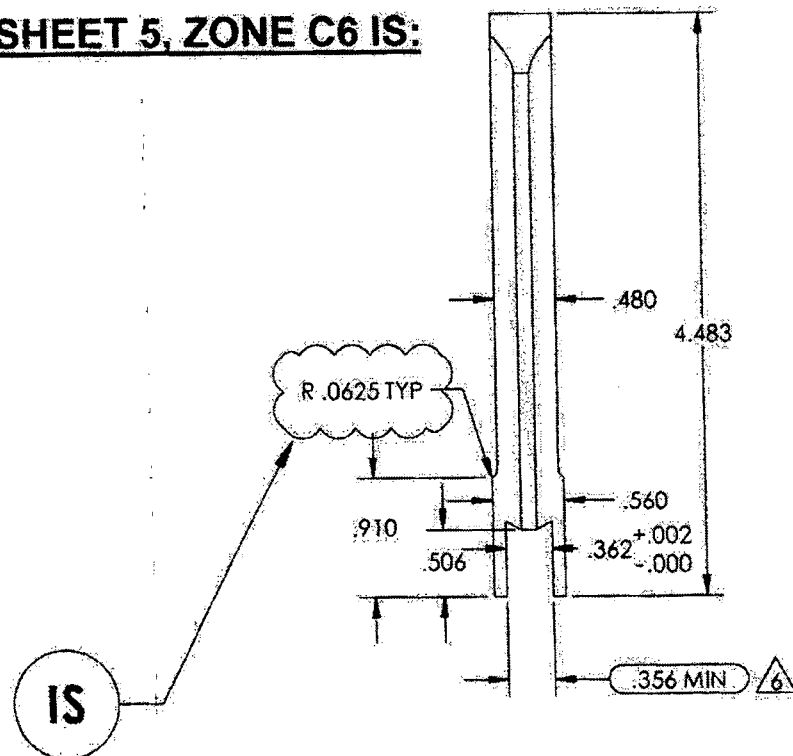
EFF.	NEXT ORDER
------	------------

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

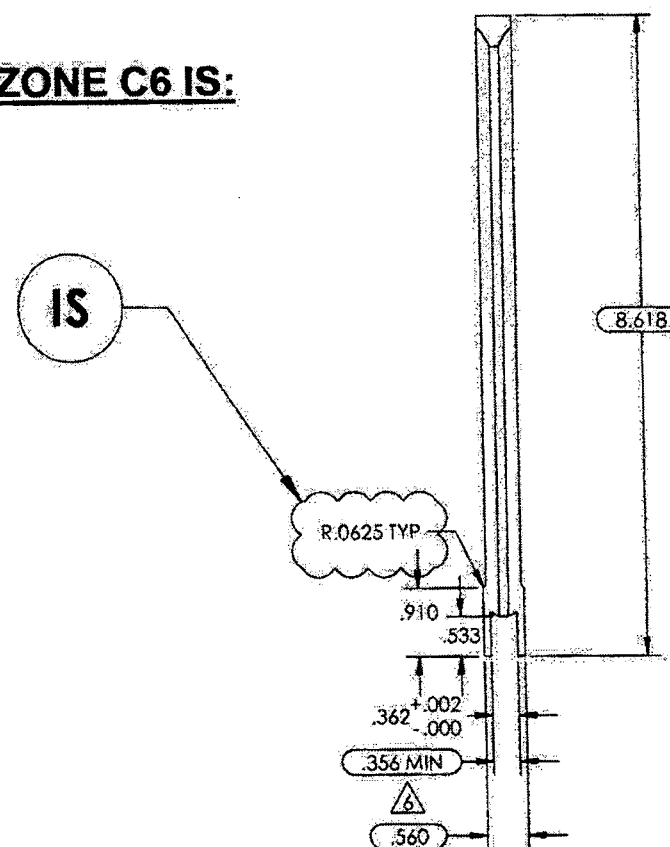
REASON: CHANGED P/N, DIMENSIONS & REVISED BOM

ECR: D-14-04

SHEET 5, ZONE C6 IS:

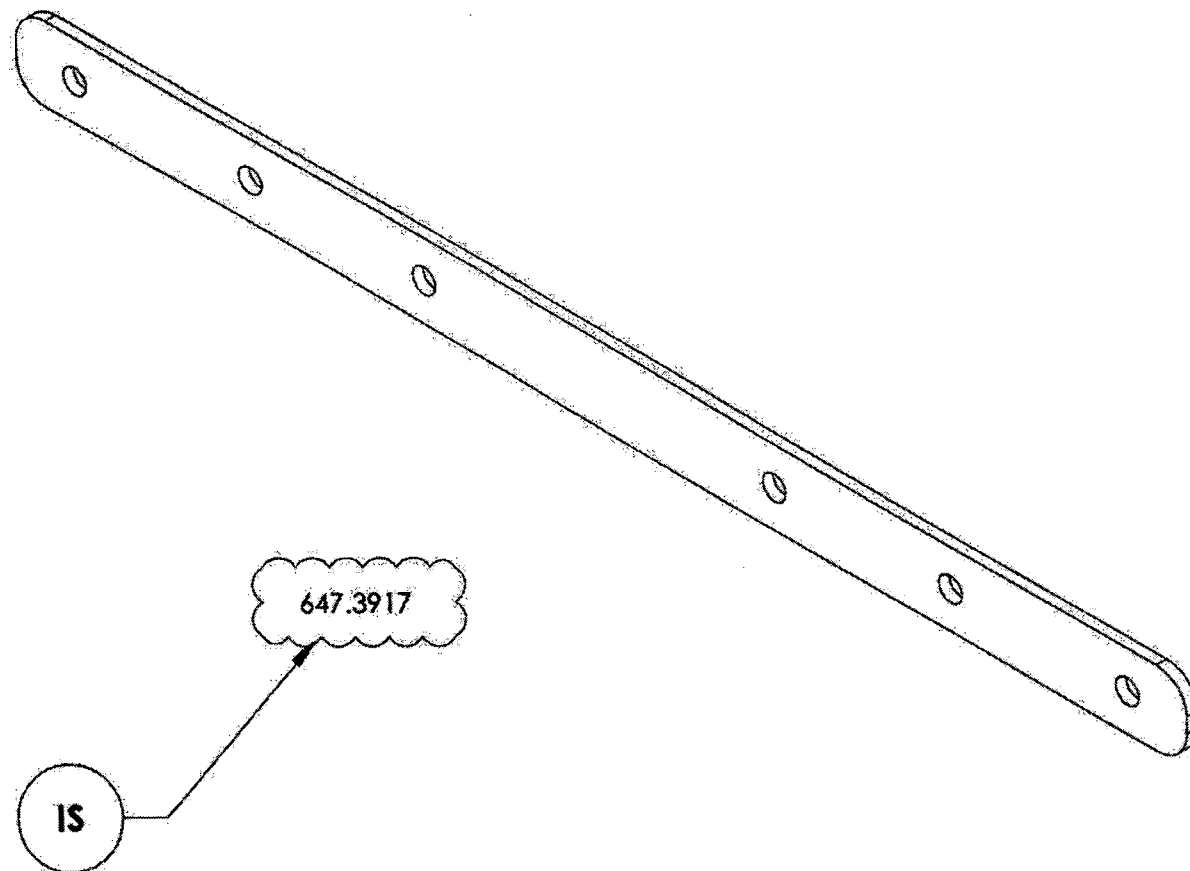


SHEET 6, ZONE C6 IS:



SHEET 1, BOM IS:

11	R	647.3917	2			DOUBLER		
F/N	TC	PART NUMBER	3903	3902	3901	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:						CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM						☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

SHEET 12, ZONE B5 IS:

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NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE RELEASE: PR1		N/C
2	INITIAL RELEASE	09/10/09	P. BRAVO
3	INCORPORATED ECN 02844, 03039 & 03593	07/24/12	P. BRAVO
4	INCORPORATED ECN 04025	08/02/13	P. BRAVO
5	INCORPORATED ECN 04038, 04085 & 04250	11/18/13	P. BRAVO

UNINCORPORATED ECN(s)

04556, 04948,

6			12	601.3072	RIVET	CR3213-6-9	
2			11	647.3917	DOUBLER		
1			10	647.3916	DEFLECTOR, UPPER HALF	△	△
1			9	647.3915	DEFLECTOR, LOWER HALF	△	△
	1		8	647.3914	BREAKAWAY TIP LONG	△	△
		1	7	647.3913	BREAKAWAY TIP MEDIUM	△	△
	1	1	6	647.3912	LOWER DEFLECTOR	△	△
			5	647.3911	212 UPPER DEFLECTOR	△	△
			4	647.3910	412 UPPER DEFLECTOR	△	△
A/R	A/R	A/R	3	601.2045	RTV, LOCTITE 598		△
	3	2	2	601.3074	RIVET	MS20470AD 6-12	
			1		DELETED		
X				647.3903	DEFLECTOR ASSY		△
	X			647.3902	LOWER DEFLECTOR ASSY HIGH		
		X		647.3901	LOWER DEFLECTOR ASSY LOW		
.3903	.3902	.3901	FIND #	PART #	DESCRIPTION	MATL	SPEC
QTY				PARTS LIST			
NEXT ASSY (S)				ORIGINAL DATE			
647.3800				DRAWN BY: DUSCHAR			
				CHECKED BY: DUSCHAR			
				DRAWING APPROVAL			
				BY: P. BRAVO			
				DATE: 09-10-09			
				CONTRACT NO.			
				UNLESS OTHERWISE SPECIFIED			
				DIMENSIONS ARE IN INCHES			
				TOLERANCES ARE:			
				2 PLACE DECIMALS ±.01			
				3 PLACE DECIMALS ±.005			
				ANGLES 1° ±.5°			
				SEE CAGE CODE			
				B 07M26			
				DWG. NO. 647.3900			
				SCALE NONE			
				SHEET 1 OF 12			

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

647.3900

REV. C

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.125 X 45.0° TYP

SECTION B-B

Ø.177 THRU 3PL

.266 X 17.9°

.045

.603

.923

R.915

4.220±.002

2.110±.002

DETAIL A

R.279

R3.406

15.896

15.304

15.046

B

B

Ø.189

6.446

40.2°

.312

0

18.502

18.127

35.8°

10.702

8.599

6.253

1.700

.777

6

.340^{+0.000}
-.002

.346 MAX

DETAIL C

.700

.035 X 45.0° TYP

.375

15.896

CH

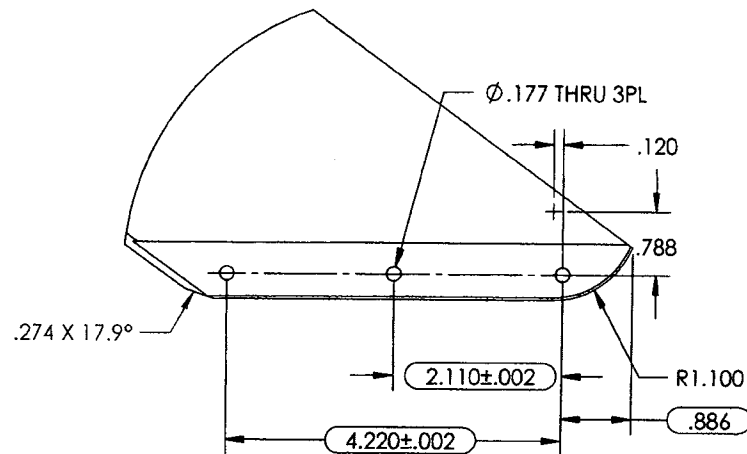
647.3911

ORIGINAL DATE (W/O/D-N-Y) 06-10-00		APICAL INDUSTRIES	
DRAWN BY D.SCHUR		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BAYVO		DEFLECTORS	
CONTRACT NO.		647.3900	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE B	REV. C
SCALE NONE		DWG. NO.	SHEET 2 OF 12

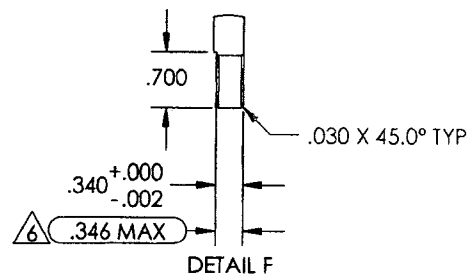
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.125 X 44.9°

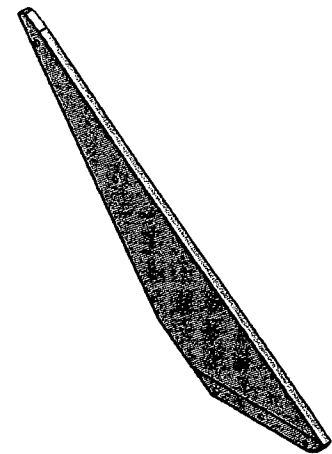
SECTION E-E



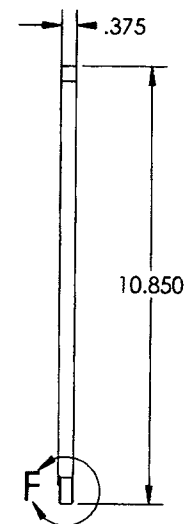
DETAIL D



DETAIL F

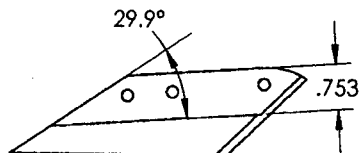


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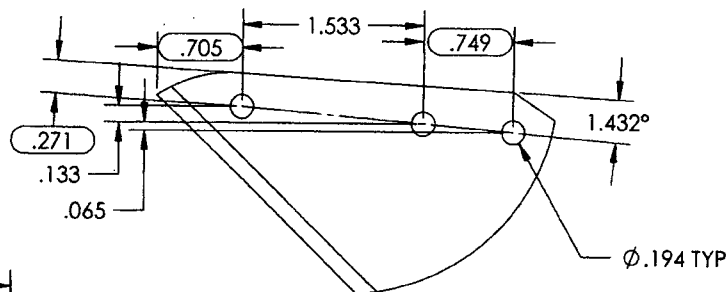


ORIGINAL DATE: 08-10-09		APICAL INDUSTRIES	
DRAWN BY: D. SCHUP		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. BRADY		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: P. BRAVO		DEFLECTORS	
CONTRACT NO.		REV. C	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		SCALE: NONE	
TOLERANCES ARE:		SHEET 3 OF 12	
2 PLACE DECIMALS ± .01			
3 PLACE DECIMALS ± .005			
ANGLES ± .5°			

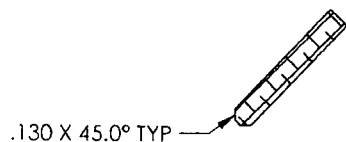
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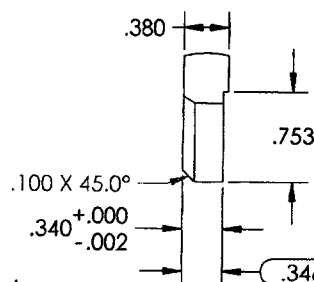
SECTION L-L



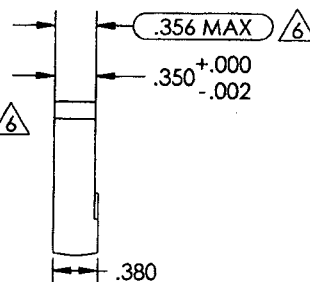
DETAIL H



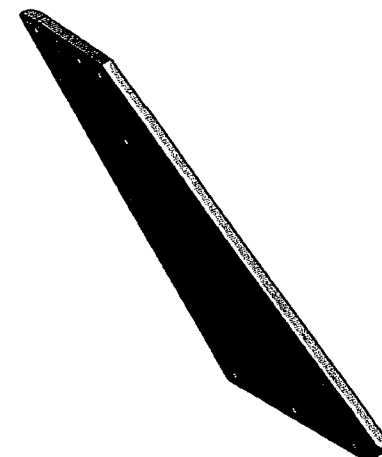
SECTION M-M



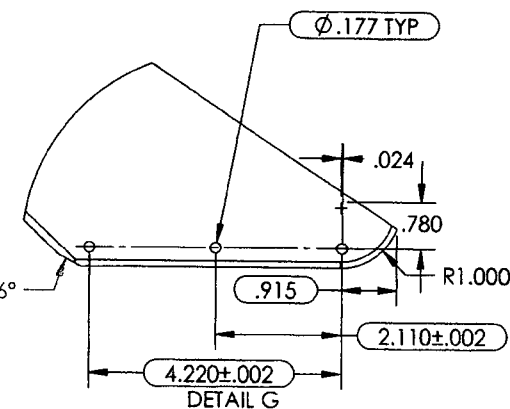
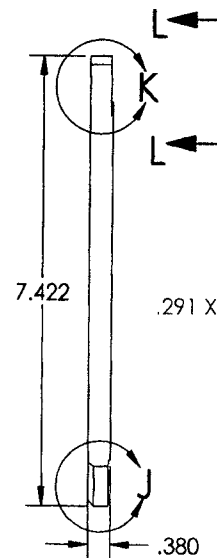
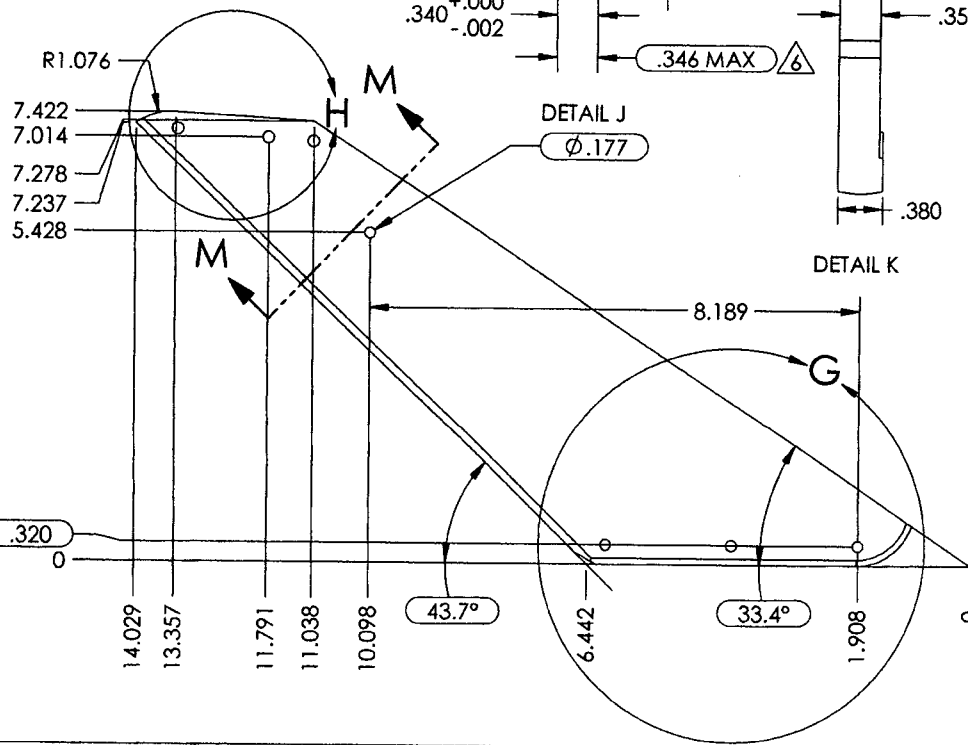
DETAIL J



DETAIL K



647.3912



DETAIL G

ORIGINAL DATE 10-10-09		APICAL INDUSTRIES	
DRAWN BY DISCHUP	CHECKED DISCHUP	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DESIGNING APPROVAL P. BRAVO		DEFLECTORS	
CONTRACT NO.		REV. C	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.001 ANGLES ± .5°		SCALE NONE	SHEET 4 OF 12
SER B	CAGE CODE 07M126	DWG NO 647.3900	

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SECTION N-N
1.80 X 45.0° TYP

SECTION AD-AD

647.3913

DEFLECTORS

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

ORIGINAL DATE: 02-10-07
DESIGNED BY: D. SCHUR
DRAWN BY: D. BARKER
CHECKED BY: D. BARKER
DRAWING APPROVAL: P. BRAYO
DATE: 02-10-07
CONTRACT NO.:
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

SHEET 5 OF 12

647.3913

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SECTION T-T

.175 X 45.0° TYP

SECTION AB-AB

647.3914

DEFLECTORS

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

ORIGINAL DATE: 09-10-09
DRAWN BY: J. CHURCH
CHECKED BY: J. CHURCH
DESIGNED BY: J. CHURCH
DRAWING APPROVAL: J. BRAVO
SCALE: NONE
SHEET: 6 OF 12

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

SECTION T-T

SECTION AB-AB

DEFLECTORS

APICAL INDUSTRIES

2608 TEMPLE HEIGHTS DR.

OCEANSIDE, CA. 92056-3512 (760)724-5300

ORIGINAL DATE: 09-10-09

DRAWN BY: J. CHURCH

CHECKED BY: J. CHURCH

DESIGNED BY: J. CHURCH

DRAWING APPROVAL: J. BRAVO

SCALE: NONE

SHEET: 6 OF 12

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

SECTION T-T

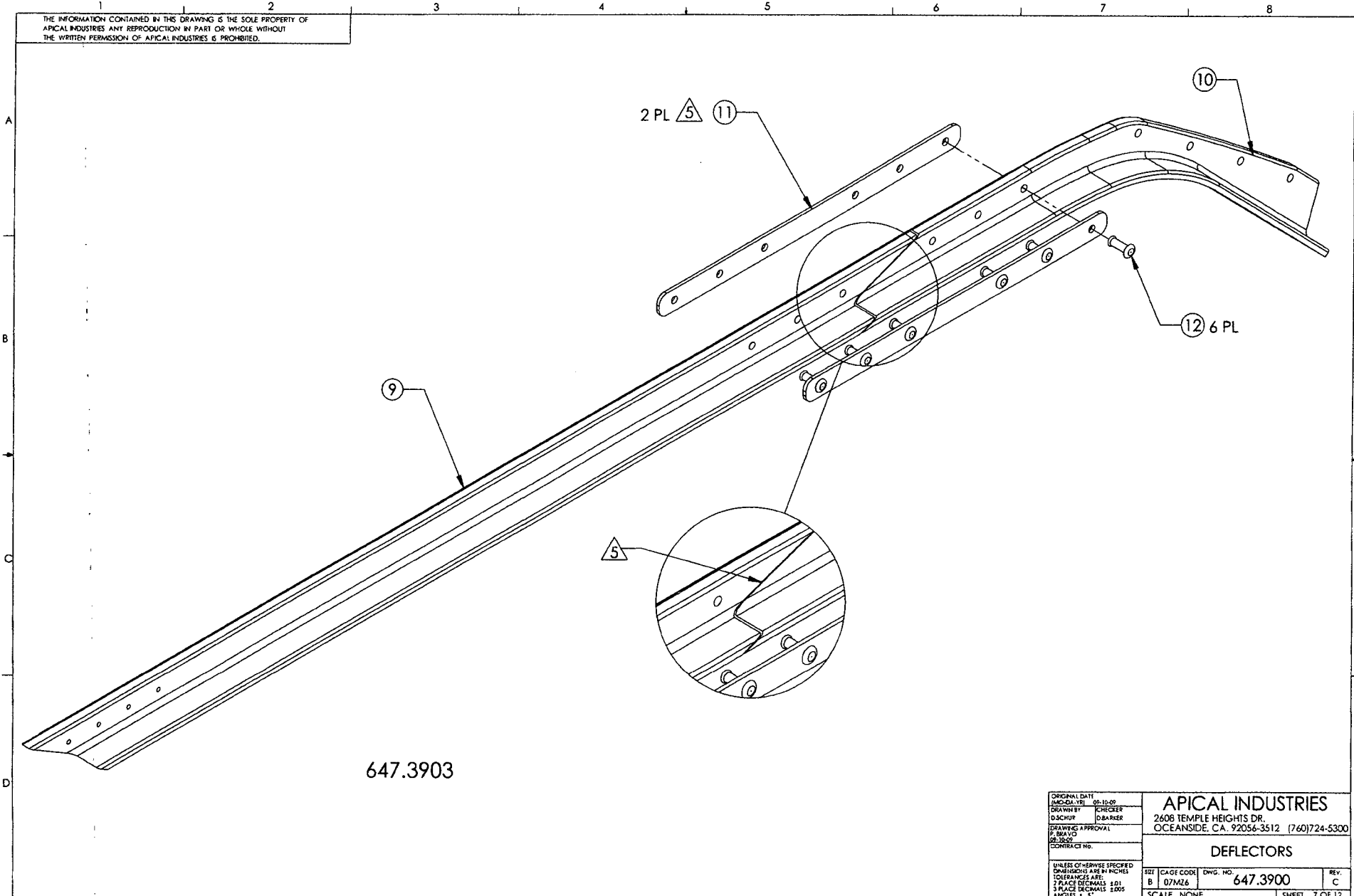
SECTION AB-AB

647.3914

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300
DEFLECTORS

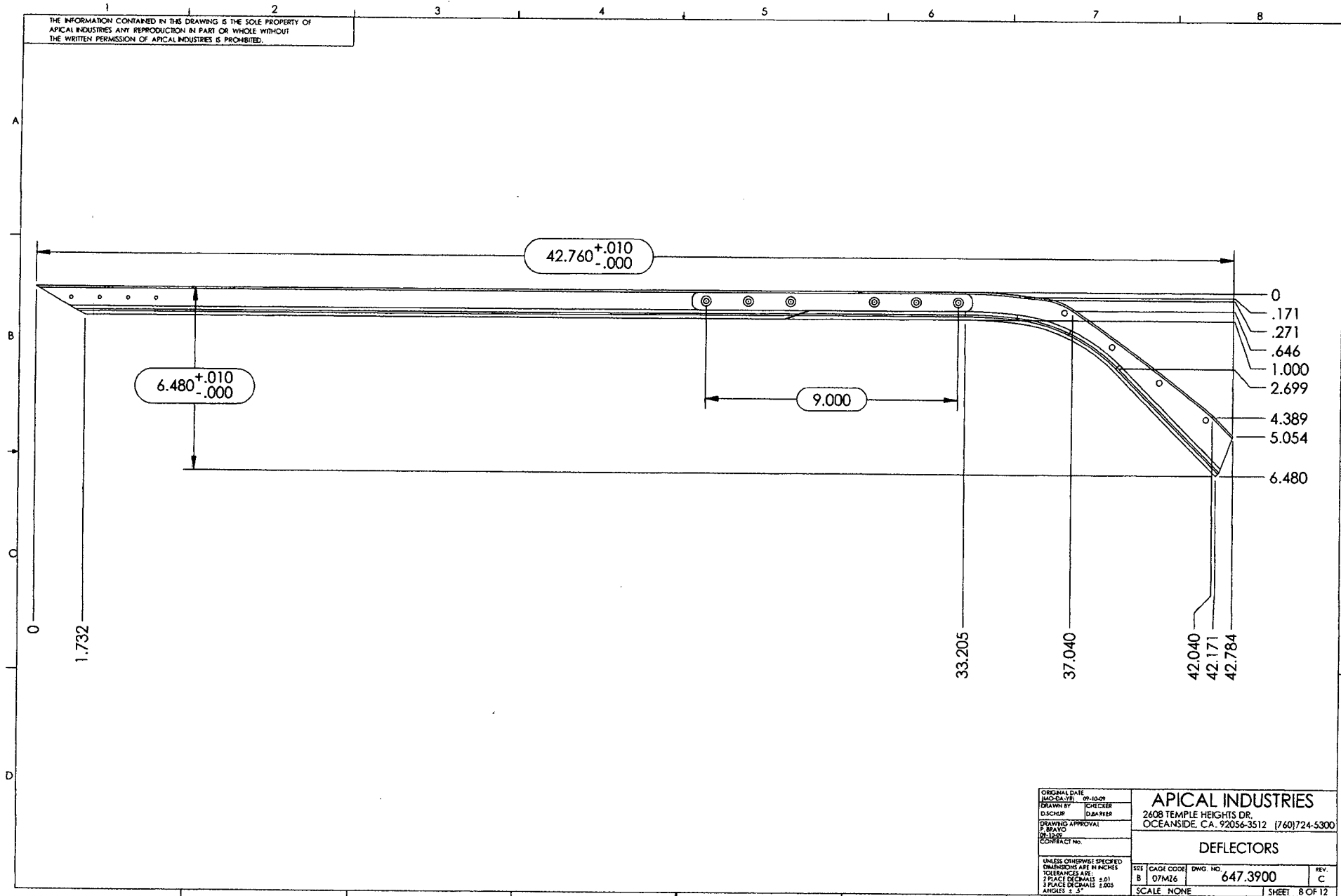
SIZE B	CAGE CODE 07MZ6	DWG. NO. 647.3900	REV. C
SCALE NONE		SHEET 6 OF 12	

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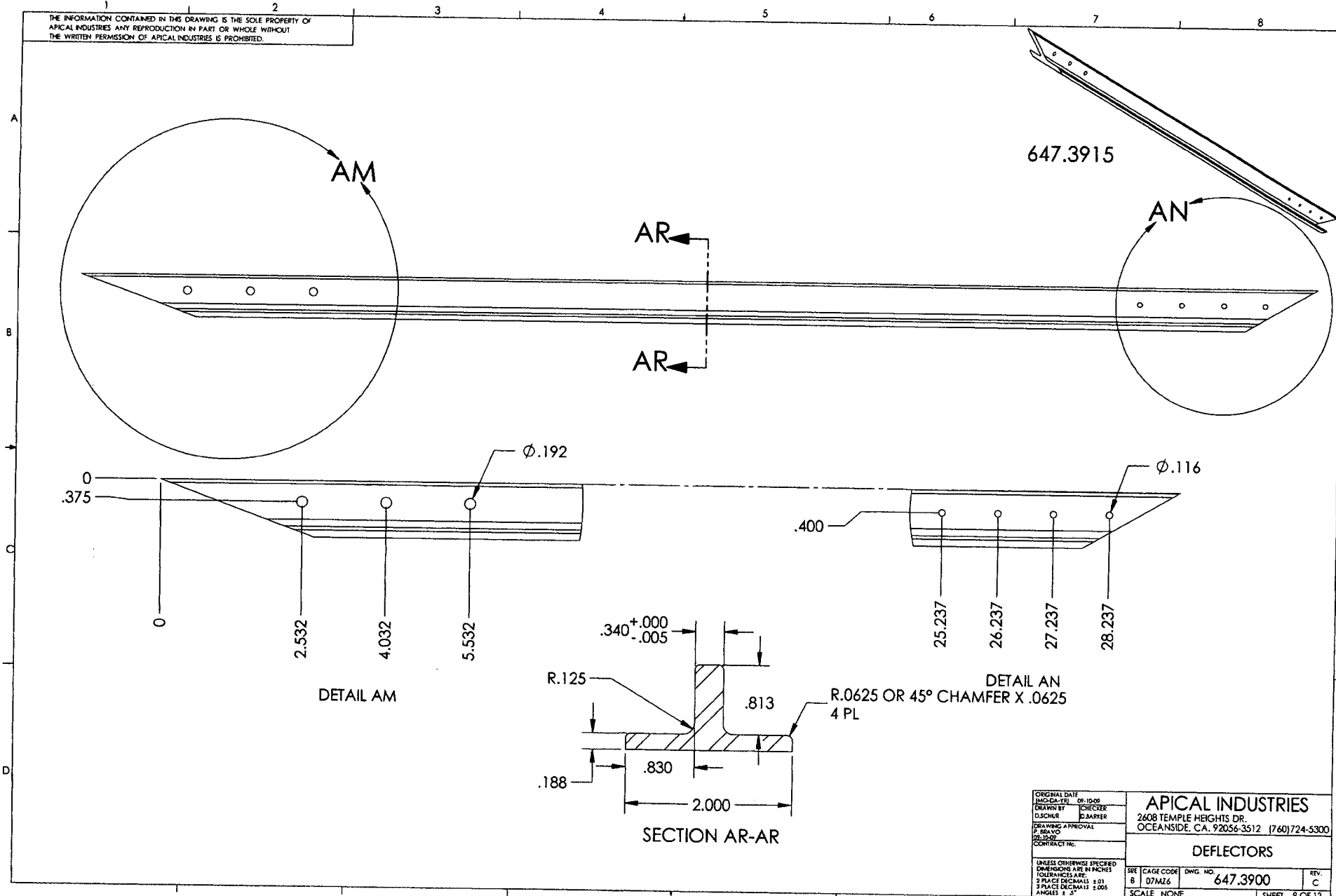
ORIGINAL DATE (MO-DA-YR) 05-10-09		APICAL INDUSTRIES	
DRAWN BY D.SCHOP	CHECKER D.BARKER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAVO 05-10-09		DEFLECTORS	
CONTRACT NO.		SIZE B	REV. C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		DWG. NO. 647.3900	SCALE NONE
		SHEET 7 OF 12	

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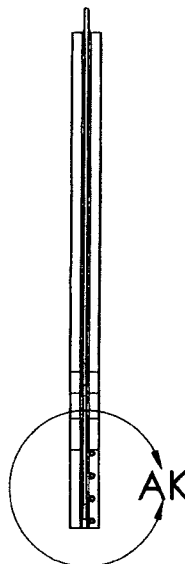
ORIGINAL DATE (MM-DD-YY) 09-10-09		APICAL INDUSTRIES	
DRAWN BY D.SCHUR		2608 TEMPLE HEIGHTS DR.	
CHECKED BY D.B. REER		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAYO		DEFLECTORS	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$		SHEET B	REV. C
		CAGE CODE 07M126	DWG. NO. 647.3900
		SCALE NONE	
		SHEET 8 OF 12	

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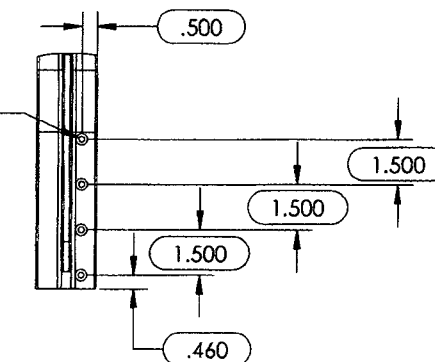


ORIGINAL DATE (MO-DA-YR) 09-10-09		APICAL INDUSTRIES	
DRAWN BY D. SCHUR	CHECKER D. SCHUR	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAVO		DEFLECTORS	
CONTRACT NO.		DWG. NO. 647.3900	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.2°		SHEET 8	REV. C
		SCALE NONE	SHEET 9 OF 12

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4X $\phi .196 \pm .010$ THRU ALL
✓ $\phi .385 \pm .020 \times 100^\circ \pm 1.000^\circ$

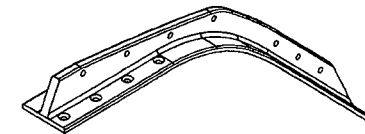


DETAIL AK

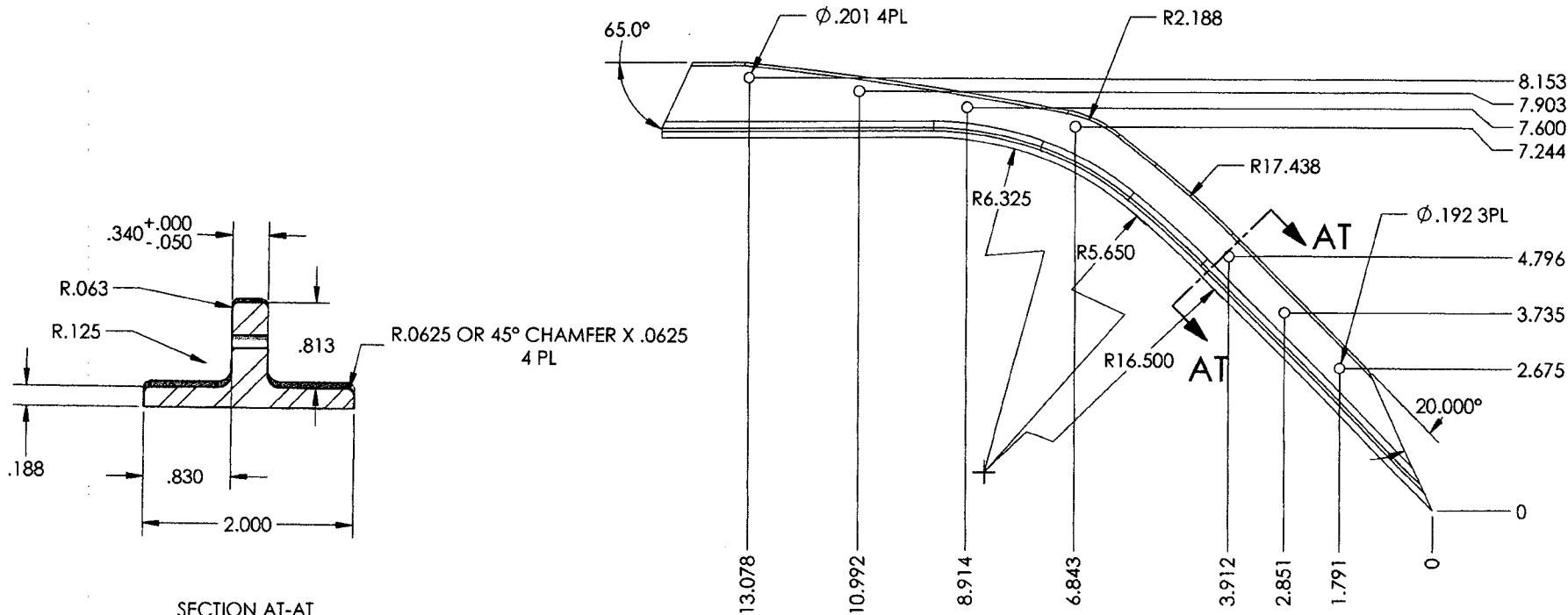
647.3915

ORIGINAL DATE JANUARY 1971 09:10:09		APICAL INDUSTRIES	
DRAWN BY D. SCHUR		2608 TEMPLE HEIGHTS DR.	
CHECKER D. BARBER		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAYO		DEFLECTORS	
DESIGN C. BERRY			
CONTACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$		SHEET B	REV. C
SCALE NONE		SHEET 10 OF 12	

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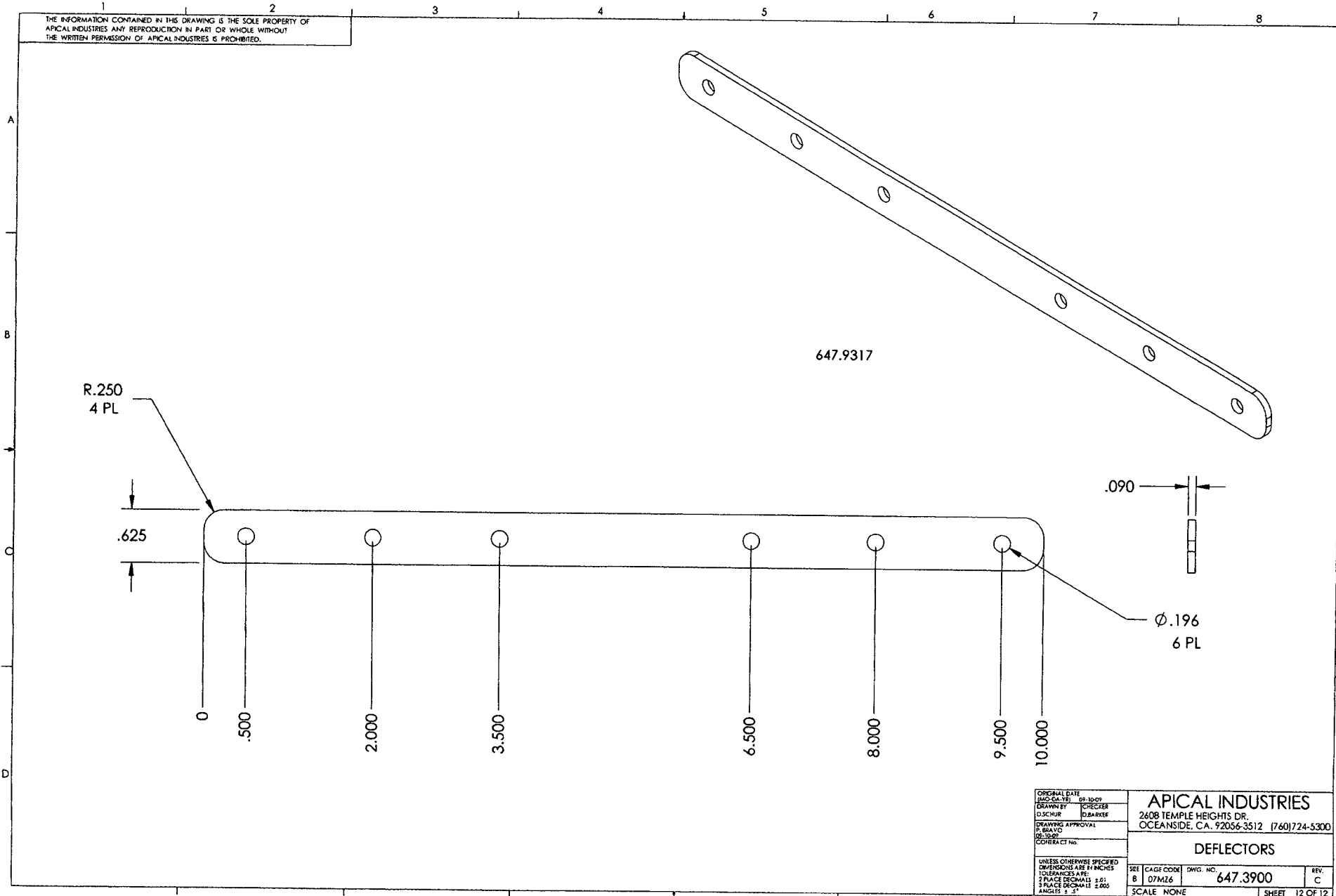
647.3916



SECTION AT-AT

ORIGINAL DATE (JMD-DA-YR) 09-10-09	APICAL INDUSTRIES		
DRAWN BY D. SCHOR	CHECKED D. BARKER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAVO		DEFLECTORS	
REVISION CONTRACT NO.		DWG. NO. 647.3900	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE CAGE CODE B 07M26	REV. C
		SCALE NONE	SHEET 11 OF 12

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THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



ORIGINAL DATE (MM-DD-YY) 09-10-09		APICAL INDUSTRIES	
DRAWN BY D. SCHUP	CHECKED D. BARKER	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAVO 09-10-09 CORRECTION No.		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.1°		REV. NO. 07M26 CAGE CODE B SCALE NONE	REV. NO. 647.3900 C
		SHEET 12 OF 12	